Lesson 86 - The Supplement Approach To Nutrition

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1. Introduction

One day in August, a thirty-three-year-old woman went to her doctor because she had a water retention problem. The family doctor advised the woman to take supplements of vitamin B-6 (also known as *pyridoxine*).

The doctor didn't say how much of the vitamin to take, so the woman started eating three or four vitamin tablets at each meal. "I started taking the vitamin in megadoses (large amounts)," she later told reporters. "I believed that was the way that vitamins are supposed to work. Taking large amounts seemed to be the in-thing for the 1980s."

After taking the B-6 supplements for two months, she still had a water retention problem. "My ankles were swelling, and I was still about twenty pounds overweight from all the water I was holding." So she returned to her doctor who told her to just start taking larger doses of the vitamin.

"I didn't bother to ask him how large a dose," the woman said, "I just started taking more." By late October, she was taking between six to twelve grams of the vitamin each day. The minimum daily requirement for B-6 is about two to four *milligrams* per day. This woman was taking 3,000 to 4,000 times the amount needed.

By December, she started having a constant tingling in her feet and difficulty walking. "I coudn't get down the steps to my business," she told the newspapers, "and my feet felt like there were 50-pound weights tied to them."

She still persisted in taking huge doses of vitamin B-6, convinced that her doctor must be right.

Four months later, she could not even hold a fork in her hand or sign her name. The megadoses of vitamin B-6 had so severely disrupted her nervous system that the woman was incapable of performing even the simplest routine task.

"The vitamin ruined my health," she said, "and it forced me to sell my second business."

One of the neurologists who treated the woman had this to say: "There is an excellent chance that the large doses of the vitamin had a causative role in her illness. We must assume that megadoses of B-6 can injure both motor and sensory nerves."

In the same newspaper that this story appeared in, there was also an advertisement for the vitamin by a health food chain. "Vitamin B-6," the ad stated, "has been used to treat schizophrenia, water retention problems, and to build muscles by athletes. Shouldn't you add this wonder vitamin to your regular diet-supplementation program?"

Vitamins. Supplements. Minerals, enzymes, amino acids, brewer's yeast, dolomite—all are extracted, artificial, and fragmented dietary additions, and they have no place in health-promoting nutrition.

Yet the appeal and lure of dietary supplements is strong—so strong that a number of nutritionists and spokesmen have created an entire dietary school and philosophy that prescribes the regular use of potentially dangerous and utterly worthless nutritional additives and aids.

This lesson discusses the dangers of the supplementary approach to nutrition and why such a fragmented view of health is doomed to failure.

2. The Supplement Approach To Nutrition

Someone once said that there are as many approaches to nutrition as there are nutritionists. There is the "protein school" of nutrition which emphasizes a high-protein diet and protein foods over all else. One group tells us we must eat meat and drink milk; another group tells us we must base our diet on grains and seaweeds. There are vegetarians, fruitarians, sproutarians, and breatharians. There are nutritionists who defend junk foods and promote fast foods. Just about every conceivable approach to nutrition has its supporters and adherents.

This lesson is about one of the more bizarre cults of nutritionists: the supplementalists, or those who advocate powders, pills, capsules, and supplements of vitamins, minerals, and proteins. There have already been several lessons telling why we don't need nutritional supplements in the diet. You have already learned about the fallacies of using inorganic minerals, fragmented vitamins, and other worthless powders, pills and potions.

Yet the supplement approach to nutrition remains a trap for the unwary and uneducated. You need facts if you wish to educate your clients, friends, family, and patients about the folly of following the recommendations of the supplementalists. This lesson, then, focuses on the school of nutritional thought, and those spokesmen, that advocate the use of supplements as a normal part of a healthy diet.

2.1 The Supplement School and Its Beliefs

The supplementary approach to nutrition is based on these erroneous beliefs:

1. The human organism can utilize inorganic minerals, vitamins, amino acids, etc.
2. Elements of nutrition can be fragmented and employed in part instead of in total.
3. Nutritional needs have been accurately determined and totally analyzed.
4. More is better.

All of these beliefs are false. Let's briefly examine them one by one.

2.1.1 Fallacy #l: We Can Utilize Inorganic Minerals and Vitamins

When my grandfather was a young man, he plowed the clay fields each spring to prepare for planting

cotton. He told me that every year one of the poor women who lived in the area would come to his fields with a spoon and a bucket. She would squat down near where he had plowed and start to spoon up some of the dark black clay into her bucket until it was full.

My grandfather thought that the woman was perhaps gathering clay from his particular field to use as a poultice, since the dirt in his fields was a darker color than other farms in the area. One day he noticed that the woman was putting spoonfuls of the clay into her mouth and chewing it up. One spoonful would go into the bucket, and the next spoonful would go into her mouth.

He took his lunch pail over to the woman squatting in the field and offered her his sandwich, thinking that maybe the, woman was crazed from hunger and had taken to eating dirt.

The woman looked at my grandfather in embarrassment and refused the offered food. "I'm not hungry," she told him, "f just have a craving for this kind of clay. My body wants the salts in it."

Dirt of clay-eating was, and still is, a common practice in some parts of the poor rural South. It even has a name—*pica*, or the craving for unnatural nonfood substances. Many times the diet in poor regions of the country consists of, polished rice, grits, lard, white flour, and other totally demineralized foods. In a bizarre effort to compensate for their mineral-poor diet, the poor people (usually nursing mothers or older women) would develop "cravings" for clay or dirt.

Of course dirt-eating did not improve the health of these physically-deranged people; they could no more get minerals from the soil than they could get calories from the air.

Yet today there are still people who want us to eat inorganic minerals for health. The only difference is that these people have extracted the minerals from the dirt and just put them into a nice clean pill or capsule. But the approach to nutrition is the same. It doesn't matter if you eat clay with a spoon or swallow a pill from a bottle, you are still making a futile effort to get your mineral needs from a totally inappropriate nonfood substance.

We cannot utilize minerals, vitamins, and other elements of nutrition that are inorganic in nature. Our bodies are not meant to process such nonfood items. Many of the minerals and other nutritional elements that are packed into a pill originally came from rocks (dolomite), industrial wastes (fluoride), and even scrap metal (iron)! There are people today who would never consider sticking a spoonful of dirt into their mouths, yet they gulp an inorganic food supplement each day that is little more than dirt and soil that has been "prettied up."

Our mineral needs, and other nutrient needs, can only be satisfied by *organic* elements as found in plants. We cannot process dirt or soil into usable elements, nor can we metabolize extracts of these soils or chemicals that make up the supplement pills. We must eat plants (fruits, vegetables, nuts, seeds, etc.) that have elaborated inorganic mineral compounds into organic compounds and chains if we want to obtain real nutrition. Plants take minerals and nutrients from the soil; we take minerals and nutrients from the plants. We cannot bypass this all-important step as the supplementalists would have us believe.

2.1.2 Fallacy #2: Nutritional elements can be used in their fragmented form instead of in total.

Every nutritional supplement, no matter how complete, exists in an unnatural and fragmented form. To make a mineral, vitamin, or protein pill, you must first destroy the natural food source it occurs in and then refine and extract a specific element from that food. By so doing, you destroy and remove all the natural co-existing elements of nutrition that accompany the extracted element. As an example, consider the mineral iron.

Iron is present in a number of high-grade fruits and vegetables, such as the cherry or apricot. Suppose a chemist wants to make an iron pill. He could take raw inorganic iron and just stuff it into a capsule, as was once done with surplus nails, or he could take some natural source of iron (such as the cherry) and chemically extract it.

The mineral iron that is present in a cherry, for example, is readily absorbed and used by the body

because *the other necessary elements for the absorption of iron co-exist in the cherry or food itself*. For instance, ascorbic acid aids the absorption of iron in the body by helping to convert *ferric* to *ferrous* iron. The cherry has the needed ascorbic acid present with the ferric iron compounds. If you swallowed a pill that had the iron extracted from the cherry but not the accompanying ascorbic acid, then your body would simply not have the needed co-existing elements to use the iron.

Nature packages our vitamins, minerals, and other nutritional needs in complete foods. There is no chemist smarter than nature; there is no laboratory as complex as the human body. Fragmented forms of minerals, vitamins, and other nutritional elements can never be as efficiently used (if used at all) as the total, complete array of nutrients that are abundantly present in every natural, wholesome food.

2.1.3 Fallacy #3: All of our nutritional needs have been determined and are accurately known.

The supplementalists base their nutritional approach on such concepts as Minimum Daily Requirements, Recommended Daily Amounts, and Therapeutic Dosages. They believe that they can determine how much of a specific nutrient a person may need, and the best dose of that substance to give. For example, let's look at vitamin A:

The Recommended Daily Allowance (RDA) for vitamin A is 5,000 IU (international units). Of course the RDA for vitamin A, like most RDAs, is somewhat meaningless to begin with since it is based on averages, or a "typical" person. Vitamin A requirements increase or decrease depending upon the lifestyle we follow and the regular diet we follow. One of the nutritionsts who strongly believes in using vitamin supplements states that for improved health, we should take 10,000 IUs and if we need a therapeutic or megadose of the vitamin, then we should increase our vitamin A supplementation to 35,000 IUs per day.

He also warns us that 75,000 IUs of vitamin A produce toxicosis in the body and that 200,000 IUs of vitamin A daily over a period of time can result in death.

The truth is that there is no one constant, standard or safe amount of vitamin A to universally recommend. There has never been a way to experimentally determine the optimum dose of vitamin A a person should ingest each day. As long as you swallow pills containing vitamin A, you have little control or knowledge of how many IUs your body needs or can use. It is quite possible to take a continually excessive level of vitamin A for weeks or months before you realize the irreversible harm that has been done.

If you want extra vitamin A, why not play it safe and get the vitamin from natural foods that it occurs in, such as cantaloupes, peaches, carrots, apricots, or most fresh fruits and vegetables?

The supplementalists will tell you that they know exactly to the last milligram how much of any specific nutrient that you need. You should remember, however, that new vitamins, minerals, enzymes, and other co-nutrients are being discovered all the time. No one really knows the full range of nutrients that the body requires to maintain perfect health, and you can be certain that there is no pill or supplement that can contain all of these life-preserving elements.

We do know, however, that fresh wholesome foods do contain all the nutrients we need for superior health and well-being. This has been proven beyond a doubt because millions of people for thousands of years have prospered very well on such a diet without ever swallowing one pill or one supplement. No chemist, no laboratory, and no nutritionist can make such an unequivocal statement nor replicate such a convincing experiment.

To repeat: We do not yet know what nutrients we need, or in what amounts, to produce radiant health. We do know that wholesome unprocessed fruits and vegetables do contain all of these elements, *both known and unknown*, and we would do well to rely on these alone to supply all of our nutrient needs.

2.1.4 Fallacy #4: More is better.

The "more is better" school of nutrition has been in control since the nineteenth century. These people believe that since a little is good for you, then a lot must be better. It is surprising that intelligent people will fall for this ruse. Suppose you run five miles per day for exercise. This amount of vigorous activity is enough to keep you in good health and promote a healthy metabolism. Suppose, however, that you decided since running five miles is great, then running fifty miles per day would help you ten times as much.

If you could even attempt to run fifty miles every day, you would quickly discover that you are in fact tearing down the body and totally exhausting its resources and reserves. The same way with good food. Since we have been told that a *little* protein is needed for good health, we think that a *lot* of protein would automatically mean much better health.

It's simply not so, and any excess whether in diet, exercise, or even relaxation, will have negative effects on your health.

Vitamins, minerals, protein, or any nutrient taken in excess of the body's needs become toxic and either must be eliminated by the body or stored, which may result in a toxic overdose.

With nutrition, "more" is not "better." Enough is enough is enough, so why burden your body or empty your pocket book with needless nutritional overkill?

2.2 Who's to Blame?

Who are the people who are promoting the supplemental approach to nutrition and why are they so successful? The answer is that there is a willing, gullible public eager to take the easy way out when it comes to health and diet, and there are clever spokesmen and vested interests who do a superior job of selling hogwash to the people.

Let's see why the supplemental school of nutrition has such a strong appeal, and who its active supporters are.

3. The Appeal Of The Supplement School

You may wish to try an interesting experiment, if you have a young child. When the child becomes hungry, offer him or her either a piece of fresh fruit or a large vitamin capsule to choose from. A silly experiment, right? Of course the child or any adult who is truly hungry will select the easily identifiable food or fruit and bypass the colorless, odorless and tasteless pill.

Yet Americans regularly gobble pills, capsules, and powders as a substitute for natural foods and wholesome nutrition. Why is that? Why would an adult put his faith and good health in an unidentifiable pill shaken out of a bottle? Why would anyone eat capsules, pills, vitamin supplements and mineral potions instead of fresh, delicious, succulent and sweet fruits and vegetables?

There are several reasons why the "pill school of nutrition" holds such a powerful fascination for today's adults. Let's look at the reasons that people are fooled into buying and swallowing pills for nutrition instead of good wholesome food.

3.1 Eat Anything You Want!

One morning I found myself in a breakfast doughnut shop near an elementary school. I was getting change for a morning newspaper when I looked over to a table where a mother had her two school children.

The mother was handing the boy and girl a cup of frozen orange juice and a big sticky sweet roll for their breakfast before she dropped them off at the nearby school. As the children ate the sugar-laden junk food for breakfast, the mother reached into her purse and carefully pulled out a piece of tissue paper that held two huge vitamin capsules.

In between bites of the doughnuts, she popped the pill into her son's and daughter's mouths. "Now swallow your vitamins so you'll be strong and healthy," she prompted. She absent-mindedly lit a cigarette and felt satisfied that she had discharged her motherly duties so well. In one fell swoop, she had neutralized the bad effects of a doughnut breakfast and assuaged her guilt by just sticking vitamin pills into her children's mouths.

Eat anything you like, but just take your magic vitamin pill and all is forgiven. All of your nutritional problems wiped out with just one swallow. Is there any wonder that there is such a strong appeal for a pill?

The public likes the "pill concept." It is a noncontroversial approach to nutrition that does not require any changes in diet or lifestyle. You can continue eating your favorite junk foods and you never have to question or face your bad living habits. Vitamin pills and dietary supplements are crutches for the nutritionally crippled. They are easy to standardize, profitable to promote, and give the appearance of effects without requiring any efforts.

Quite simply, the pill approach to nutrition is popular not because of what it does, but what it does not require us to do—change the poor eating and living habits that make us turn to supplements in the first place.

4. The Supplementalists

The supplemental school of nutrition has three categories of supporters: 1) Vocal spokesmen who seek to attract a following; 2) Magazines and publications that cater to advertisers and the supplement industry; and 3) Health food stores and manufacturers of the supplements. While it is nonproductive to engage in name calling and finger pointing, you should be aware of the different approaches taken by these supporters of the supplement approach to good health.

4.1 Writers That Aren't Right

Every few years, a new spokesman for the supplement school of nutrition arrives at the newsstands with the same message for the masses: Swallow more pills for better health. The message may be worked differently; it may be couched in new seductive phrases such as "super-nutrition" or "therapeutic nutrients" or "meganutrition," but the point is always the same: Continue with your poor dietary habits, but take a magical supplement and your problems will disappear.

They write about "megavitamins," "magic minerals," and "longevity enzymes." They promise you salvation in a bottle and relief in a vitamin store. They quote miraculous cures effected by exotic nutritional additives and pills. And they make money selling their books and articles to an eager public

that is nutritionally naive.

4.2 A Supplement Proponent

Perhaps no sadder testimony to the ineffectiveness and dangers of pill-gulping can be found than from the words of a woman known worldwide for her recommendations of daily supplements: Adelle Davis.

Mrs. Davis was a well-known and outspoken proponent of the supplemental school of nutrition. Her book *Let's Eat Right to Keep Fit* sold several million copies and it is full of recommendations for various supplements, pills, extracts, and other nonfood substances. When asked by an individual what her daily dietary routine is like, the woman responded:

"For years I have taken after breakfast a capsule containing 25,000 units of vitamin A and 2,500 units of vitamin D, both from fish-liver oil; 200 or 300 units of vitamin E or d-alpha tocopherol acetate distilled from soy oil; a tablet containing 5 milligrams of iodine taken daily, and 500 milligrams or more of vitamin C. With my other meals, I also take three tablets of calcium combined with magnesium, and sometimes another tablet of magnesium oxide alone to balance the calcium in the milk I drink. If I've eaten salty food, I add another three tablets or more of potassium chloride, 180 milligrams each. Besides yeast and liver, I also take with each meal two B-complex vitamins."

The woman was taking about 20 to 30 pills every day of her life. "People frequently asked me how long they should take supplements," Adelle Davis wrote. "I am tempted to tell them, 'Until you get tired of good health.'" The woman concluded her discussion of nutrition with the statement: "I expect to take supplements as long as I live, though I wish I might get all nutrients from foods."

Adelle Davis did indeed take supplements as long as she lived—until she died of cancer.

Adelle Davis was not alone; other active promoters and writers who have ballyhobed the marvelous effects to be gained from supplements, pills, and potions have also enjoyed poor health and premature death. Quite frankly, the success or failure of a nutritional school of thought should be gauged only by the health or sickness of its proponents and spokesmen. The supplement school of nutrition has had a dismal history in this respect.

4.3 A Catalog of Pills and Supplements

Today there are about a half dozen magazines and a score of popular periodicals that consistently promote the use of supplements in their pages. Their pages are so full of ads and come-ons for supplements that they appear to be nothing more than catalogs of wonder drugs. And these magazines exist for one reason:

Money. The majority of advertising in these "health" magazines comes from supplement and vitamin manufacturers. Do you expect to see an honest article that exposes the dangers and shortcomings of supplements in a magazine that is full of paid ads for these pills? Of course not. The truth is that for many of these health-oriented publications, their major financial support comes from companies who want to sell the public pills and capsules.

Quite often these magazines will publish articles that actively promote a specific nutrient, say zinc for example. You can be sure that in that same issue there will be full-page ads offering zinc supplements and pills. Could this be merely coincidence?

These magazines work hand in hand with the supplement industry. They create the perceived need for supplements, and the manufacturers offer you the promised cure-all—all in the same magazine and almost on the same page. If this doesn't strike you as a little too fortuitous, then you are indeed a great idealist.

4.4 The Pill Store

Have you been inside a typical '"health food" store lately? You'll probably see very little "food"' or indeed even "health," but you'll certainly get an eyeful of bottle after bottle of vitamins, minerals, supplements, and other exotic potions.

And that's not loo surprising at all, especially when you consider that 40 to 50% of a health food store's profits comes from the sale of supplements.

"Vitamins, minerals and other diet supplements are my bread and butter, an owner of a small health food store confided to me. "I can mark up each bottle about 250 to 300% over what I pay for it. They have an indefinite shelf life; they can't go bad like produce, and I can usually sell one person about $25 to $40 worth at one swoop."

"I can't really prescribe these pills and supplements to my customers—that's against the law—but I can tell them how Mrs. Such-and-Such bought a bottle and how it helped her. You know, that kind of thing. I act people coming in here all the time looking for some miracle vitamin that's going to cure all their ills. I don't sell supplements: I sell hope to sick people. Maybe they help, maybe they don't. I don't think they're any worse off."

But of course they are worse off. They've spent good money on useless products, and, even worse, they do nothing to change the conditions that brought about their health problems in the first place. Health food stores may not practice deception, but you could hardly call them a service to their customers who purchase the supplements and vitamin pills.

The health food stores are not the villains in this tale of supplements. The people who are really making money from the supplement scam are the manufacturers and suppliers of these pills and potions. Consider this: That $5.95 bottle of multiple vitamins that you bought probably has about 20 cents worth of chemicals in it. The huge profits from the sale of these pills are plowed back into advertising and promotion to get you to buy even more bottles of chemicals and supplements.

The supplement market operates on a tremendous profit margin and markup. The industry is unpoliced and relatively unregulated. For example, vitamins and mineral supplements marked "natural" and "organic" may legitimately contain only 10% of its elements from natural sources; the remaining 90% could be the selfsame chemicals sold in any other brand.

Be wary of any school of nutrition that promotes products for profit. You may be sold a false bill of goods.

5. The Only Safe Source Of Nutrients

Dr. Herbert M. Shelton has studied the effects of food and nutrition on human health longer than almost anyone else in the world today. He has long detailed the dangers of depending upon supplements, pills, and powders for adequate nutrition. When asked about the use of nutritional supplements in the diet, Dr. Shelton replied with this list of four important facts:

1. We do not yet know how much of any food element the body needs.
2. We do not yet know all of the elements that are structural and functional constituents of the human body.
3. We do not know that all of the vitamins have been discovered.
4. We do not know that there are no other and hitherto unsuspected food factors in foods that are as

essential as those that are known."

Since our knowledge of nutriton can never be complete, it is impossible to construct a pill or supplement that can most assuredly supply us with all of our needs. "These things being so," writes Dr. Shelton, "there can be only *one* safe source of nutriment, and only one source that is capable of supplying us with all known and unknown food elements. *This source is natural foods*."

There can never be a pill or supplement that will furnish a human being with all of the nutritional elements required for superior health. Our physiology has developed over hundreds of thousands of years on fresh, wholesome fruits and vegetables. Our entire system is geared toward extracting elements of life from plant foods alone. We cannot survive on pills; we cannot thrive on supplements.

We require and need only fresh foods from the plant kingdom and nothing else.

5.1 One-a-Day Multiple Vitamins and Other Lies

Still, there are people who are fascinated by pills. "Just to be safe," such a person says, "I always take a good, all-around multiple vitamin and mineral tablet." "Just to be we," such a person will say, "I swallow a tablespoonful f iron supplement each morning."

These people are not buying good nutrition; they are seeking peace of mind in a pill or tablet. Yet if they knew that they were swallowing lies along with the pills, they might seek peace of mind elsewhere. Consider this newspaper report which appeared only this month: "Survey Finds Multivitamins Dangerous."

In a survey of the 41 most commonly-purchased multi-vitamin pills, it was discovered that many of them contain either *dangerously high or inadequate doses* of vitamins and minerals. According to a clinical nutrition researcher, "Most vitamin supplements we looked at exceeded the 200 percent mark for the Recommended Daily Allowance, which makes the vitamins perhaps dangerous." The researcher further stated that these supplements often contain excessive amounts of fat-soluble vitamins such as A, D, E, and K which can be harmful since these vitamins are *stored in the body* when taken in amounts greater than the body's needs.

There have been many cases where people were found suffering from vitamin toxicosis due to the abnormally large amounts they were taking and retaining through supplements and pills. Well, what about wholesome foods such as carrots, melons, etc., that are naturally high in vitamins; Does this mean that we can get too many vitamins from these natural sources?

5.2 Safety in Nature

If you are eating fresh foods in their natural state, you cannot overdose on vitamins. Why is this? For one thing, the sheer bulk of the food alone prevents you from eating amounts that would contain excessive vitamins. Of course if you juice all of your foods and drink quarts of carrot juice every day, then it might be possible to get too many natural vitamins. Yet even in these circumstances, there are built-in safeguards in natural foods.

For example, the vitamin A in plant foods comes from a compound called *carotene*. The carotene in these vegetable foods is converted to a form of vitamin A in the liver *only if there is a need for the vitamin in the body*. In other words, if you ate about ten large carrots, you could potentially be ingesting around 100,000 units of vitamin A. Yet if your body only needed say 20,000 units of vitamin A, then the carotene conversion to vitamin A would not occur for the other potential 80,000 vitamin A units.

The body has an innate wisdom and knowledge of its true needs. As long as we supply the body with its natural food and fuel, we need not fear the consequences. Any time vital elements are extracted from our foods and packaged as concentrated supplements and pills, then we are taking serious chances with our health. No scientist, no chemist, no nutritionist has the type of knowledge that the body possesses. No

laboratory can duplicate the wonderous processes of the human body. No experiment can replicate the intricate life processes that occur during food digestion and assimilation. No pill or supplement can ever be labeled completely safe.

There is only one safe source for our nutritional needs: fresh, wholesome foods from the plant kingdom. All else is suspect and should be rigorously avoided.

6. Questions & Answers

I recently heard that the only way you can meet your recommended daily amounts for vitamins and minerals is to take a good all-around supplement. Are you saying that we don't need pills no matter what we eat?

> What you are probably referring to is the recent study by a medical researcher who discovered this startling fact: Up to 80% of the typical American's diet consists almost entirely of products made up of sugar, fat, white flour, and alcohol. The study then stated that since so many calories are consumed in these nutritionally worthless foods, then we would have to take some type of pill to make up the difference if we don't want to increase our calorie intake. The researchers then speculated that if we tried to satisfy all of our nutritional needs from food alone hat we would have to nearly double our calorie intake.
> This is pure nonsense. Of course if you eat the typical junk food diet of most Americans, then your diet will most certainly be lacking in essential nutrients. The solution is not to eat more of the selfsame nutritionally worthless foods in order to get enough vitamins or minerals. And you already know that swallowing a few pills is not the right approach.
> Wouldn't it make more sense if these people would eliminate the 80% of their diet that furnishes no nutrition, and instead eat only wholesome, unprocessed foods that are packed with all of our essential nutrients? In this way, they would not have to increase their calorie intake; in fact, they would lower it because they would have eliminated all the high-calorie, low-nutrient foods that make up over half of their diet.

You can argue all you want to, but here's one thing that proves you wrong. When I feel run-down, I take a good overall vitamin and mineral supplement for five to seven days. I feel great and all charged up at the end of the week. Now tell me that supplements are worthless!

> Okay—supplements are worthless. Seriously, what you are experiencing is not at all uncommon. We have never said that supplements do not have an effect; we have only said that they cannot supply proper nutrition.
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> Some people will feel better no matter what kind of pill they swallow. This is called the *placebo* effect and it has been well-documented. However, supplements can often have an effect that is simply not illusory. They can provide a strong stimulus to the body just as any toxin or foreign agent can. This stimulus that accompanies the supplement is often mistaken for a beneficial effect; instead, it is the body's response to an unnatural and inorganic presence. There are some additional materials at the end of this lesson that examine this false side-effect of taking supplements. Just because you are "stimulated" do not assume that you are being helped.

Article #1: The Great Supplement Hoax! by T.C. Fry

One has but to delve into a little biology, biochemistry and physiology to know that supplementation is not only impractical but a tragic commercially fostered hoax. There is no such thing as supplementation and there cannot be! There are foods and nonfoods. Supplements do not fill a single condition required of a food. That is the delusion of supplementation.

Under the "just to be safe" illusion we intoxicate our bodies with unusable substances. Fortunately, most supplements furnish only a placebo effect—their foremost benefit lies in the absurd belief that they will keep us from suffering deficiencies. But beliefs do not protect us from their ill effects. For instance, there are well authenticated cases of scurvy among supplement takers who were ingesting two or three grams of vitamin C daily, enough to suffice for a hundred days if it were usable.

Most supplements taken orally meet with a just fate-being indigestible (and therefore unabsorbed), they pass into the bowels. To the extent they are absorbed they create problems for the organism. As you'll discover in this issue there is no case for supplementation. There is a case against so-called supplementation. There is a case for eating whole ripe raw foods of our biological adaptation. That and only that is capable of furnishing our needs in a physiological manner.

For the most part supplements are synthetically derived, even if advertised as being of "organic" origin. This representation is an outright fraud, for a reading of the label will reveal that only a small percentage is from organic sources. Synthetic substances are neither digestible nor metabolizable. That's the best part about most supplements, for the body passes them through the intestinal tract. On the other hand, those parts that may be absorbed are treated like drugs, not nutrients. The body is stimulated by them just as if caffeine, nicotine, alcohol, or other drugs had been taken. That lends to the mistaken idea that vitamins give energy. That's false; If anything, they take body energy just as do other drugs. Only carbohydrates are raw materials for energy.

Mineral supplements are derived from inorganic sources. They are totally unusable. Though we have a heavy need for minerals, the very minerals we require are toxic if taken in an inorganic state. We need iron, selenium, iodine, fluorine, magnesium and a host of other minerals, but if taken in supplements as derived from rocks, soils, sea water or ores, they are unusable and poisonous. One of the foremost characteristics of poisons is that they stimulate, that is prick or goad the body into a frenzy. The body steps up energy expenditure to cope with a heavy eliminative situation. Because this makes us feel "hyper" we are likely to mistake this squandering of energy as being derived from the toxic substance ingested rather than a draft on our energy stores. It bears repeating that the body derives its energies from carbohydrates, not vitamins, minerals or supplements.

If you have any deficiencies, you can't make them good by supplementation. Only a few fractionated foods among the supplements can be appropriated. But, even so, eating refined fractionated foods is like taking refined sugar, refined white flour and so on. Almost anything derived by fractionating foods would be poor even if eaten in context with the whole food from which taken because the parent food is not of our biological adaptation. Many supplements are derived from bacterial and yeast fermentative and putrefactive processes. No matter how rich in nutrients, these substances are unusable. Taking these concentrated nutrients to supplement a depraved and deficient diet is like eating tobacco leaves for nutrients instead of fruits. The difference between eating fruits and deficient diets with supplements is fruits are something the body can use in a physiologic manner; and deficient diets including supplements are something the body expends its resources on needlessly for purposes of protection and excretion.

Eat whole foods to which you are biologically adapted, more specifically, fresh ripe fruits with dried fruits if an extraordinary requirements of caloric values exists. If this needs supplementing, and it doesn't for it is replete with more nutrients of every description than we require, then supplement it with super

nutrient-rich vegetables like broccoli, lettuce, celery, cauliflower, carrots, etc.

Remove yourself from that army of victims of the commercial game called supplementation. You're wasting your money *and your health!* Wholesome foods suited to the human dietary are all that you need.

Article #2: Vitamins: A Quarter Billion Dollar Humbug by Dr. Herbert M. Shelton

Perhaps nothing has done more to confuse the man on the street and, all too often, the doctor in his office, about what constitutes nutrition than the ballyhoo about vitamins. The trouble, be it understood, is not with vitamins, but with the commercial exploitation to which they and their imitations are being subjected. It is estimated that the American people are now spending a quarter of a billion dollars a year for "vitamins." That's a lot of money! America has become "vitamin conscious" and the gangsters who are responsible for thus duping the people are reaping rich harvests from the vitamin racket.

"Vitamins" are sold in the drugstores, department stores, grocery stores, five and ten cent stores, health food stores, and by mail. Every conceivable means of advertising them is employed and nobody seems to think that there can be any such thing as honesty in advertising. Anything goes in the advertising, if it sells "vitamins."

The medical profession is not alone to blame for the exaggerations that are being peddled about vitamins. The manufacturers of the so-called vitamin preparations are chiefly to blame, while many medical men of high standing have dared to lift their voices in warning about the vitamin cure-all now being offered to the public.

Chiropractors, osteopaths, naprapaths, physiotherapists, naturopaths, dietitians, "health" lecturers, and similar cure-mongers and the "health food" stores have all played a very big part in promoting this vitamin racket. Various types of doctors prescribe and sell these things to their patients. It seems to be easier to prescribe (and sell) vitamin pills (perhaps, it is almost more profitable) than it is to find and remove cause.

Health food stores reap a rich harvest off the sale of vitamins. The men and women who run these stores, though rarely possessed of any knowledge of human ills and the proper care of the sick, and never making a proper inquiry into the conditions for which they prescribe, do not hesitate to prescribe vitamins for all who come into their stores looking for cures. The health food stores no longer sell healthful foods; they sell cures.

Vitamins have been promoted as cold preventives. Extensive experience together with careful tests have combined to show that vitamins do not prevent colds. What is the difference between taking vitamins to prevent colds and ignoring cause and taking cold vaccines to prevent colds and ignoring cause?

Vitamins have been promoted as cures for chronic fatigue. Chronic fatigue may result from any one, or any combination of a number of, causes and any effort to cure the fatigue without removing its cause can only fail. This use of vitamins is identical in principle with the use of drugs.

Vitamins have been promoted as cures for arthritis. The hundreds of thousands of arthritis patients who have taken large quantities of vitamins and watched themselves grow worse are living testimonials of the failure of vitamins as a cure for arthritis. Vitamin D has especially been bally-hooed as a cure for arthritis. It has been used in huge doses. These have often given rise to toxic symptoms. This probably always makes the arthritis worse.

Vitamins have been promoted both as preventives and as cures for gray hair. They do neither. Those who have used them have been disappointed.

In a recent issue of the *Journal of the American Medical Association*, Dr. Julian M. Ruffin and David Cayer, of Duke University, record details of an investigation conducted to determine the value of adding vitamin supplements to the usual American diet.

I think it is significant that the "usual American diet," which is by no means an ideal diet, was used in this series of tests. Two hundred volunteer medical students and technicians were used in the tests. These volunteers were divided into five groups. They were all "in apparent good health" and were "consuming the usual American diet." The tests were run for thirty days "because that period is found sufficient for recovery under vitamin treatment" of patients actually ill from vitamin deficiency.

- One group was given vitamin tablets and liver extract tablets.
- A second group was given yeast extract tablets and vitamin pills.
- The third group was given vitamin pills and a sugar pill made to resemble the others.
- The fourth group was given vitamin pills only.
- The fifth group was given sugar pills only.

None of the volunteers were permitted to know what was in the pills they were taking.

Each man kept a daily record of his weight and of such symptoms as "gas" and indigestion, nausea, vomiting, abdominal pain and diarrhea. Also, he kept a daily record of his impressions of any effect on his appetite and on his "pep" or energy.

Ruffin and Cayer report that a "significant increase in diarrhea and a highly significant increase in abdominal pain and nausea and vomiting occurred in those receiving liver extract and yeast."

This effect of yeast is certainly no new find and I was not surprised that liver extract causes similar symptoms.

The experimenters at Duke University point out that "The use of vitamins is widespread throughout the country, not only in the treatment of disease, but also by apparently normal persons" and state, as a conclusion based on the results of their own and other tests: "It has been implied that even when no demonstrable deficiency exists, one's sense of well-being and ability to perform work can be improved greatly by the addition of vitamin supplements to the diet. There is at present no evidence to substantiate this point of view."

Medical men are, and long have been, prescribing vitamin preparations (cod-liver oil, yeast, etc.), vitamin extracts and synthetic vitamins in all types of conditions and standing around in groups and cursing because the expected results have not been forthcoming.

No one claims that present methods of determining vitamin deficiencies are sufficiently delicate to reveal the earliest stages of deficiency. There is no reason why correct use of real vitamins in these undetectable incipient stages will not result in definite improvement in health and increase in energy.

What, then, is the trouble? It is evident to the careful student of nutrition that the trouble is not simple or singular, but complex and multiple.

First; the "vitamins" are only imitations. They are not genuine. Only fools expect these synthetic make-believes to produce results.

Second; they are not properly used. Vitamins do not produce energy. They do not put on weight. They are enzymes that enable the body to utilize proteins, carbohydrates, fats and minerals. The "usual American diet" is especially deficient in minerals. To add vitamins to such a diet and not add quantities of the deficient elements, and expect results, it to expect vitamins to work in a vacuum.

Results may be obtained by using real vitamins, as these exist in natural foods, and taking them along with the other food elements, as these, too, are found in these same natural foods. Better nutrition

requires better food, not merely the addition of vitamins.

Need I describe the "usual American diet" of white bread, denatured cereals, white sugar, refined syrups, canned fruits and vegetables, jellies, jams, preserves, cakes, pies, candies, embalmed meats, pasteurized milk, coffee, beer and cigarettes, taken by these "apparently normal students and technicians?" Only an ignoramus would expect vitamins, even if they were real, to do anything with a diet like that.

Vitamin salesmen, vitamin manufacturers, vitamin con men of all grades, types and sizes are encouraging people to buy and take vitamins. They do not encourage people to revolutionize their eating practices. "Science" in an illegitimate union with commercialism is responsible for flooding the world with the deluge of lies that bewilder, confuse and mislead the poor man on the street and the ignorant doctor in his office.

Article #3: Are 90% or More of the Vitamins You Take Going Down the Drain? by T.C. Fry

The above headline is from an advertisement of, all things, a vitamin ad! It goes on as follows:

> THE PROBLEM WITH TODAY'S VITAMINS
>
> *"It is an undeniable fact that so-called 'natural' vitamins are not truly natural. Actually, they are made from coal tar (a 'natural' source) but are not extracted from foods as is widely believed. They are artificial and synthetic, regardless of what certain vitamin manufacturers claim.*
>
> *"Because so-called "natural" vitamins and minerals are synthetic chemicals rather than nutrients, they are biologically inactive or "dead." They can benefit you only if your body is capable of performing a little miracle, namely changing their molecular structure by complexing them with the essential absorption factors and nutrient carriers. If your body fails to do that, you will receive no benefit from the so-called 'natural' vitamins and minerals you take.*
>
> *"Nutrition scientists believe that your body actually rejects, excretes and wastes as much as 90% or more of the vitamin and mineral supplements you take, receiving little or no health benefits from them!"*

Now when a vitamin manufacturer tells the truth about the products of others you'd expect to get the truth about his product. Right? Well, I wouldn't tell you the truth in order to hook you on another commerical comeon, would I now? I'm an honest Joe. I want you to buy my product so I tell you the truth about your wasting money on your supplements. They're worthless—you're just feeding your bowels. Is that a way to waste your money?

What this vitamin company is advertising is a "historic breakthrough" with an exclusive formula that helps you absorb their vitamins.

Are their vitamins truly natural? Absolutely not. They're synthetic, too! But your body can absorb them. Is this a reason you should buy their vitamins? No! That's a better reason for NOT buying them. You're better off with the nonabsorbable vitamins, which go mostly into the kidneys and bowels.

Why should you be better off with vitamins and minerals that you don't absorb?

Because, if you do absorb these vitamins, you'll be poisoning yourself, not nourishing yourself! Whether the supplements you take are derived from coal tar, petroleum stocks, fungal and bacterial fermentation and putrefaction or from truly natural foods, you're not getting anything you can use! Only the vitamins contained in whole natural foods will not poison you.

That you can't use vitamin supplements, even if refined from natural sources, derives from one salutary fact: vitamins are proteins except for a very few. As such they are co-enzymes that make the food you eat more available you. Nature puts her vitamins and enzymes within the context of a food package. Break down the package, according to the famed nutrition researcher, Roger Williams, and you destroy the teamwork (synergism) that nourishes you. Hence, even if the vitamins and minerals were, indeed, from natural sources, by their lonesome selves the body cannot use them! The body uses foods, not delusions!

Why not use ONLY whole foods? The only vitamins and minerals you're getting and using are from that source only regardless of what you believe—regardless of the bill of goods you've been sold by the slick propaganda from the manufacturers and peddlers.

If you eat anything other than the nutritious raw foods to which we are biologically adapted, you're cheating yourself. Of course, some of them may be grown on deficient soils but that's still the best bet you have! If they extracted vitamins from natural foods where do you think they'd get them from? Why, from the very same foods grown on deficient soils. Where else?

You destroy not only your body faculties but deny yourself vitamins and minerals a hundred times more by cooking your food, by making it partially or wholly indigestible with seasonings and condiments, by eating it with preservatives, synthetic vitamin/mineral additives, by eating it wrongly combined so that it is incompatible in digestive chemistry and befouls your digestion rather than nourishes you, by taking foods with oils (which coat foods and make them largely unavailable and indigestible), and by consuming alcoholic drinks, vinegars, etc.

Our truly natural foods eaten in a natural manner (raw) is the thin margin most of us survive on as well as we do. The true "miracle" is eating totally raw only the foods that you relish raw. This will supply your body with all the vitamins and minerals you will ever need.

Article #4: Resolving the Issue of Supplementation by Drs. Robert and Elizabeth McCarter

The best way to resolve the issue of the validity of supplementation of the diet with man-made supplements is to study the people who take them religiously. We see a constant parade of such people here at the ranch (the Bionomics Health Institute of Tucson). Almost every sick person who comes to us for help has been taking all manner of supplements for years, all the while watching their health fade away. Once they are taken off their drugs and supplements, detoxified and then taught how to live in a health-promoting manner, they are often amazed at how quickly their bodies respond; many coming to enjoy a state of health such as they have not known for 20, 30 or more years.

Just a few days ago a man and his wife stopped in to present us with a basket of freshly-picked peaches. They had arisen at five that morning and, along with another of our students, had driven to a peach orchard just outside of Tucson where they had picked the ripe fruit, luscious in its rich goodness. Their

bodies were dripping with sweat from their labors but their faces were filled with joy as they gave us the fruit.

Why do we bring up this episode at this time? Because, by learning to live according to the laws of life these two remarkable people changed pain-wracked bodies into healthy bodies. For years pain was mirrored in their faces, now only joy. They are now living life as it should be lived—always in health. They have no need for pill or potion, for doctor or for surgeon. They are true Life Scientists relying for true nourishment on nature's food packages, many of which they grow themselves. They have learned well the secret of life.

When the dietary intake is correct according to human design, all of the organs will be properly and consistently nourished and perfectly capable of fulfilling their duties as required. However, the systemic mosaic of intertwining functions and structural activity can be disturbed, rendered less than fully effective, reduced perhaps by as much as one-half by an imbalance, by the presence of too much or too little of any one mineral or other nutrient because of the finely-tuned internal ecological relationships, the synergisms and interdependencies, that exist among all.

Like a baseball team must have the pitcher, the catcher and all other players present and in tip-top physical and mental condition to become a winner, so must the human body have all of its required nutrients ready and available for action in the proper proportion, in the correct amounts and at the proper time if the individual is to be a winner in the arena of life.

Otto Carque was one of the first scientists to warn against creating any imbalance within the body; he pointed out that an imbalance of minerals, for example, can lead to obesity, asthma, rheumatism and other serious disorders. Louis Kuhne, a Leipzig practitioner of great renown in his day, said it well, "Man is not a machine artificially put together by combining various pieces, like an automobile, but rather a living creature in the midst of a process of development." We are alive, not static; our bodies are constantly in a state of flux. Taking supplements can disrupt the flux by thrusting an unknown into the synergism, creating an imbalance which the body cannot tolerate.

It has not been determined to any exactness just how much of any one nutrient is required for maximum health, this undoubtedly being a variable from person to person and from time to time according to functional need as, for example, under great stress. A momentary stress in and of itself can create a temporary imbalance recognized only by the monitoring agencies within the system itself.

The blood and lymph cannot be cleansed and made to flow through the 70,000 and more miles of channels throughout the body by the taking of any "magic" pill. Organs grossly deformed and malfunctoning cannot possibly be restored to health by therapeutic dosing.

One is a real student of health when he understands this one absolute of life: foods have been prepared for man, but only certain foods; man's natural food contains all that he requires to keep him living always in full health provided his lifestyle and environment are also conducive to health. Dr. Shelton reminds us that "nature ... is the author and ruler of all health and happiness, not the physician."

Many of the technological advances of science in this century are superb but, nevertheless and in spite of them, mankind would be best served by building up a store of vital funds through careful attention to his dietary needs, these being more than adequately furnished in the foods designed both to satisfy visual and palate pleasure as well as systemic need. We should look to field and forest and be content for there we will find nature's best. As Dr. Ralph Cinque has so well said, supplements are nutritional shadows, not the real thing.

The life-building forces of health are gentle, they are slow, but they are sure. They are gathered together and reinforced by a daily adherence to the principles of life, not by taking a daily recommended dose of any one isolated man-made nutrient or, indeed, by downing a bucketful of assorted supplements. If we would have abiding health through all of life, we must stop pill-popping. We must begin to live according to the principles which are sound, sure and certain to give the desired results. Here lies the true elixir of life.

All supplementation is a "slap in the face to law and order," a crude attempt to treat and "cure" without removing the cause of the trouble in the first instance. Certainly common sense negates the whole idea. Supplementation is a practice instituted and promoted by self-serving interests which foster the idea that man knows better than Nature what is needed for the maintenance of life. It is a bold-faced attempt to convince a gullible public that supplements are a simple way to prevent disease and heal hurts without making any attempt to discover and remove cause. In other words, it is a simple way for these self-serving interests to make a lot of money off of you!

Article #5: The Minerals of Life by Dr. Herbert M. Shelton

It seems quite clear that the vital importance of the organic salts of foods was established by men who were outside the regular folds. The older physiologists and physiological chemists gave no attention to them. In the tables of food analysis they were regulated to the "ash" column and ignored.

At the present day their importance is everywhere recognized. It is no longer thought that only the "nutritive values"—proteins, carbohydrates, fats—are important.

Animals fed on foods deprived of their salts (minerals) soon die. In the same manner, they die if, to these demineralized foods, are added inorganic salts in the same quantities and proportions as are found in the ashes of milk. The salts are not used except in the presence of vitamins.

Berg has pointed out that there does not exist one single complete analysis, either of the human organism or its excretions or of our foodstuffs. Not everything is known about the function of minerals in the body and of some of them almost nothing is known. Some, such as zinc and nickel, apparently serve functions similar to those of vitamins. Prof E. V. McVollum showed that animals deprived of manganese lose the maternal instinct, refuse to suckle their young, do not build a nest for them, and even eat their young. Their mammary glands do not develop properly and they are unable to secrete proper milk for their young. Here are effects commonly attributed to vitamin deficiency.

This "ash" enters into the composition of every fluid and tissue in the plant and animal body and without even one of these minerals, life could not go on. They are of the utmost importance. They serve a number of purposes. They form an essential part of every tissue in the body and predominate in the harder structures such as bones, teeth, hair, nails, etc. The bones consist largely of calcium phosphate. They are the chief factors ill maintaining the normal alkalinity of the blood as well as its normal specific gravity. Salts are also abundant in the body's secretions, and a lack of them in the diet produces a lack of secretions. They are also used as detoxifying agents, by being combined with the acid waste from the cells. The wastes are thus neutralized and prepared for elimination. Their presence in the food eaten also aids in preventing it from decomposing. Acidosis produced by the fermentation of proteins and carbohydrates often comes because the mineral salts have been taken from the food, thus favoring fermentation.

In a simplified sense we may consider the blood and lymph as liquids in which solids are held in solution—much as salt is dissolved in water. The cells, which are bathed at all times in lymph, are also semi-fluid with dissolved matter in them. If the lymph outside the cells contain much dissolved solid, as compared to that within the cells, the cells shrink in size. If there is more dissolved solid within the cell than without, the cell expands and sometimes bursts. In either case the result is pathological.

If the amount of dissolved solids within and without the cell are equal, so that internal and external

pressure are equalized, the cell remains normal. It falls very largely to the minerals of the food to maintain this state of osmotic equilibrium.

The waste formed in the body, due to its normal activities, is acid in reaction. The greater part of the work of neutralizing these acids is done by the mineral elements— the "ash."

These minerals enter into the composition of the secretions of the body. The hydrochloric acid in the gastric juice, for example, contains chlorine. Clotting of the blood does not take place without the aid of calcium or lime.

The mineral matters in food undergo no change in the process of digestion, prior to absorption, as do proteins, fats and carbohydrates. They are separated from these other elements in the process of digestion and pass directly into the blood.

If our foods do not contain enough of the right kinds of mineral salts we simply starve to death. It does not matter how much "good nourishing food," as this is commonly understood, that we consume; if these salts are not present in sufficient quantities, we suffer from slow starvation with glandular imbalance or disfunction, more disease and other evidences of decay. McCarrison showed, definitely, that foods and combinations of foods that are inadequate and unsatisfactory in feeding animals are equally as inadequate and unsatisfactory in feeding man.

Life and health are so directly related to these salts, of which little enough is known, that we can never have satisfactory health without an adequate supply of them. We may be sure that each salt has its own separate function to serve, while certain combinations of them have long been known to serve vital services in the body.

No drug salts can be made to take the place of those found in food, As Dr. William H. Hay, says: "Nature provides all her chemicals for restoration of the body in the form of colloids, organic forms, and man has for a long time sought to imitate her in this, but he has not been so very successful that we are now able to insure the recouping of the mineral losses of the body by any artificial means, arid must still depend on nature's colloids as found in plant and fruit." Well or sick, no compound of the chemist, druggist or "biochemist" can recoup your mineral losses.